



Air Quality Improvement Tools For Local Government

Working Draft 02-20-03

Category	Improvement Action	Resources
Awareness	Local government joins and participates in the SC Early Action Plan for 8-hour ozone.	www.scdhec.net/eqc/baq ; http://www.deq.state.la.us/evaluation/o3act/oaptools.htm
Awareness	Enhance ozone awareness (Outreach - Communication): assign a local agency to develop and implement a program to educate and motivate individuals to take actions to minimize ozone pollution. Includes a focused distribution of educational materials, dissemination of SCDHEC ground-level ozone forecast, increased media alerts to specific audiences, and includes action oriented components (i.e. ridesharing, telecommuting, etc.).	www.scdhec.net/eqc/baq ; www.drivecleanacrosstexas.org ; http://www.commuterchoice.gov/
Political	Use tax incentives to promote expanded use of low emissions technology, energy efficient technology, etc.	
Awareness	Establish an assistance panel through which the local area may deal with potential non-attainment issues.	
Awareness	Meet with representatives of other metropolitan areas that have implemented programs to learn from experiences. Determine feasibility of replicating successful programs or components in local areas.	
Awareness	Participate in "Rebuild South Carolina" - a program that promotes use of more reflective glass, efficient buildings, tougher energy use standards, white roofs on new houses, etc.	www.state.sc.us/energy/rebuildsc.htm ; www.millionsolarroofs.com
Conservation	Develop City and County Energy Plan (Energy Conservation): An energy plan could be developed that directs municipal departments to reduce energy use. This could include retrofitting municipal buildings/city schools and street lights for energy efficiency, i.e., "Energy Star" Program, white roofs, etc., promoting transportation alternatives, and encouraging recycling and composting.	www.energystar.gov
Conservation	Purchase Green Power if/when available. Green power is electricity generated by renewable resources like solar, wind, and even decomposing garbage in selected landfills. These resources are replenished naturally and minimize harm to the environment.	http://www.eren.doe.gov/greenpower/ ; http://www.scgreenpower.com

Awareness	Join and participate in Clean Cities (Palmetto State Clean Fuels Coalition).	http://www.ccities.doe.gov/ ; http://www.state.sc.us/energy/cleancities.htm
Awareness	Assign staff to become air quality contact/expert for jurisdiction.	
Land-use	Promote land-use planning intentionally altering the urban environment to improve air quality. Examples are transit oriented development, infill development, and pedestrian oriented development, concentrated activity centers, strengthening downtowns, balancing location of housing and employment opportunities. Can include policies, programs, or actions such as zoning regulations, design controls, “green development” practices, and incentive programs to encourage smart growth.	www.epa.gov/smartgrowth/ ; www.smartgrowthamerica.com
Land-use	Consider tree planting/landscaping standards: Planted trees reduce the need for air conditioning, reduce the heat island effect in urban areas, and reduce energy usage. Tree ordinances could be drafted to establish minimum tree planting standards for new development; and to promote strategic tree planting, street trees, and parking lot trees.	www.upstateforever.org ; www.state.sc.us/forest/urban.htm
Mobile Sources	Retrofit public heavy-duty diesel fleets. Retrofitting existing diesel engines with exhaust control technologies or converting diesel engines to natural gas are available strategies to reduce emissions. The available retrofit technologies include: a diesel oxidation catalyst, diesel particulate filters, enhances combustion modifications and crankcase emission controls (PM, CO, VOC, toxics). Elective catalytic reduction, lean NO _x catalyst technology, engine modifications (NO _x). (Trucks and Buses: Seattle-school bus, DC-metro bus & sanitation trucks, Norfolk- Marine engines, St. Louis, Atlanta, Houston).	www.epa.gov/otaq
Mobile Sources	Retrofit private heavy-duty diesel fleets. Retrofitting existing diesel engines with exhaust control technologies or converting diesel engines to natural gas strategies are available to reduce emissions. The available retrofit technologies include: a diesel oxidation catalyst, diesel particulate filters, enhances combustion modifications, and crankcase emission controls (PM, CO, VOC, toxics). Elective catalytic reduction, lean NO _x catalyst technology, engine modifications (NO _x).	www.epa.gov/otaq
Mobile Sources	Require replacement of all gasoline golf carts with electric, propane, natural gas, etc.	http://www.arb.ca.gov/enf/advs/adv305.pdf http://www.thinkenergy.com/a/view/em5515.html
Mobile Sources	Assess vehicle registration fee to fund repair/retirement program for high-emitting/polluting vehicles and consider accelerated vehicle	

	retirement (scrappage) programs to encourage vehicle owners to voluntarily retire their vehicles sooner than they would have otherwise.	
Mobile Sources	Implement a smoking vehicle program (requiring smoking vehicle reports and repairs).	
Mobile Sources	Conduct leaking gas cap checks: Leaking gas caps release volatile organic compounds into the atmosphere. The program encourages the public to obtain a free gas cap leak checks and gives a free replacement cap if it is found leaking.	http://www.rcc.org/oem/gcwhy.html http://www.raqc.org/ozone/ozone-gascap.htm http://www.tmacog.org/CommuterServices/gascapsummary.pdf http://www.marc.org/environment/airquality/gascap.htm ;
Mobile Sources	Encourage not overfilling your fuel tank. Stop when the nozzle clicks off.	http://www.raqc.org/community-resources/hot%20tips-archives.htm ; http://www.cdphe.state.co.us/release/2000/061600.html ;
Mobile Sources	Assist with establishing alternative fuels for public fleets. Fuels other than gasoline and diesel that are used to power on-road vehicles. Examples of alternate fuels include bio-diesel, electricity, ethanol, liquefied petroleum gas, methanol, and natural gas.	www.epa.gov/autoemissions/whycare.htm ; www.fueleconomy.gov
Mobile Sources	Assist with establishing alternative fuel infrastructure for private sector clean fuel fleets. Fuels other than gasoline and diesel that are used to power on-road vehicles. Examples of alternate fuels include bio-diesel, electricity, ethanol, liquefied petroleum gas, methanol, and natural gas.	www.epa.gov/autoemissions/whycare.htm ; www.fueleconomy.gov ; http://www.afdc.doe.gov/altfuel/pse_general.html#what
Mobile Sources	Require taxi operators licensed to serve the commercial airports to purchase ultra-low-emission vehicles or alternative fuel.	www.epa.gov/autoemissions/whycare.htm ; www.fueleconomy.gov
Awareness	Prohibit/limit/ban open burning (all year or May - September or on Ozone Action Days) encourage to mulch clearing debris rather than burning it.	
Awareness	Restrict mowing days and times all year/during ozone season/ozone action days (focus on public). Promote the use of electric and propane lawn mowers.	
Mobile Sources	Electrify Truck Stops: Provide the drivers of refrigerated rigs and sleepers with places to plug in and avoid idling engines.	http://www.oksolar.com/inverters/truck_inverters.htm ; http://fleetowner.com/ar/fleet_volt_solution/
Awareness	Support coordination and/or consolidation of Metropolitan Planning Organizations (MPO), Council of Government (COG), and/or county efforts related to air quality, land-use, and transportation planning.	
Mobile Sources	Seek to hold jurisdiction VMT growth rate to population growth rate; Encourage transportation-related land use strategies that reduce VMT; Promote multi-modal mobility; Support market mechanisms; Provide	

	relevant information to Planning Commissions. (Support Smart Highways)	
Mobile Sources	Convert bus fleets to hybrid electric, propane, compressed natural gas (CNG), or liquid nitrogen gas (LNG).	
Awareness	Promote telecommuting as an option where an employer allows an employee to perform their job tasks either from home or from a designated tele-work center.	http://www.commuterchoice.gov/
Awareness	Use compressed work weeks or flexible work hours, which helps reduce traffic congestion during the peak driving hours by spreading out the number of vehicles on the roadway over a longer period of time.	http://www.commuterchoice.gov/
Awareness	Consider parking facility controls that can include employers offering a tax-free transit/vanpool benefits and which limit the amount of parking and encourage carpooling, mass transit, etc.	http://www.commuterchoice.gov/
Awareness	Encourage carpooling/vanpooling as an option where employees living in the same area agree to ride to work together rather than to drive their individual vehicles to work.	http://www.commuterchoice.gov/
Mobile Sources	Encourage mass transit (transportation choices and alternatives): While the only local mass transit choice that is currently available in some areas is the transit bus. Example of future options such as bus rapid transit, commuter passenger service offered by trains on existing rail systems, a diesel multiple unit or "light rail".	
Mobile Sources	Limit vehicle idling time and the location where idling occurs. This is a particular concern for school busses as fumes build up and in some cases enter into buildings exposing children to diesel fumes.	www.beeponline.org
Mobile Sources	Support development of park and ride facilities at the urban fringe and along major corridors.	
Mobile Sources	Encourage and support improved traffic operational planning, engineering and maintenance for existing and future transportation infrastructure.	
Fuels	Require Stage I and/or Stage II vapor recovery at gas stations	
Airports	For commercial airports, encourage and support propane, natural gas tugs, or electrifying ground service equipment, improving operations on the ground (reducing idling time, etc.), use cleanest fuels in fleets, consolidate shuttles, and increase choices for passenger access to and from airports.	